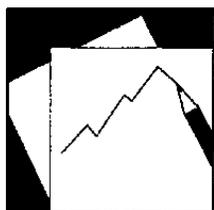


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Vested Interests in a Positive Theory of IFI Conditionality

Wolfgang Mayer and Alex Mourmouras

IMF Working Paper

Policy Development and Review Department

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Prepared by Wolfgang Mayer and Alex Mourmouras¹

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Abstract

<p>The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.</p>
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Understanding of the domestic political environment is key to building broad country ownership and the successful implementation of reform programs supported by international financial institutions (IFIs). But recipient countries are not unitary actors: policymakers are influenced by special interest groups (SIGs) opposing reforms, leading to distorted policies. Using a new model of the financial relations between a benevolent IFI and a sovereign borrower subject to influence by SIGs, we analyze the determinants and welfare impacts of conditional and unconditional assistance. While conditionality may raise IFI welfare, economize on the amount of assistance, and lower domestic distortions, it may not always raise recipient country welfare. Recipient governments are always better off if assistance is provided unconditionally.

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I. INTRODUCTION

The International Monetary Fund was created in the aftermath of World War II partly to help member governments resolve temporary balance of payments difficulties in ways that do not damage national and international prosperity, and the World Bank was established at the same time to address long-term development problems. Subsequent experience has shown that stronger country ownership of adjustment and reform programs is key to improving the effectiveness of the financial assistance provided by the two international financial institutions (IFIs).² Indeed, weak country ownership and an unfavorable domestic political environment lie behind several failed reform programs supported by the two IFIs. On the other hand, factors under IFI control, such as effort in program design and monitoring, have not been decisive in promoting program success.³

But while ownership is vital for program success, achieving the broad consensus needed to move reforms forward is difficult. Countries are not unitary actors. Ethnic, linguistic, regional, and other divisions often weaken policymakers' resolve to undertake and sustain reforms. Special interest groups (SIGs) that benefit from the continuation of distortionary economic policies emerge naturally during any process of economic reform and change (Olson, 1982).⁴ For example, lobbyists representing owners of specific factors vie for trade protection and other government favors. SIGs also lobby for protection against new technologies, which depresses growth (Krusell and Rios-Rull, 1996; and Bridgman, Livshits, and MacGee, 2001).⁵ The influence of organized interest groups is easy to document in both industrial and developing country settings (Grossman and Helpman, 1994 and 2001). Government-owned enterprises have at times diverted resources from producers or consumers for the exclusive benefit of small groups of politically connected people in both industrial and developing countries.⁶ The special interests controlling oil and other natural

² On conditionality and ownership, see IMF (2001a-c), Khan and Sharma (2001), and Boughton and Mourmouras (2002).

³ Mecagni (1999); Dollar and Svensson (2000); Ivanova et. al. (2001).

⁴ The pioneering study of lobbies as instruments of political influence is Becker (1983).

⁵ Dixit, Grossman and Helpman (1997) extended the classical theory of optimal taxation due to Ramsey by incorporating self-interested governments influenced by vested interests.

⁶ Hellman and Kaufmann (2001) and Åslund (2001) describe state capture and rent-seeking in transition countries. Oxford Analytica (1995) put this well in the African context: "Adjustment programmes have tended to run counter to preconceptions among the African intelligentsia and bureaucracies, who have favoured state control and African self-sufficiency. They also threatened sectional interests who gained advantage from subsidised foreign exchange and credit, a large parastatal sector and protection against imports.

resources have sometimes turned against reform programs even if they are pro-market in general, because they fear that reforms threaten their privileged positions and associated capacity to earn rents.⁷

The Fund has long recognized that the effectiveness of its assistance is intimately related to domestic political, social, and economic conditions in the countries it supports with financial assistance. Its conditionality guidelines call for the institution to pay “due regard to the domestic social and political objectives, the economic priorities, and the circumstances of members, including the causes of their balance of payments difficulties.”⁸ But the Fund has not always paid as much attention as it has done in recent years to the need to ensure greater country ownership. In the 1980s and 1990s, it extended its mandate into areas that have generally come to be viewed as not critical to its core mission. But now the momentum has shifted. Fund conditionality is being focused and streamlined and greater attention is being paid to the need to respect domestic political realities.

This paper takes the domestic political realities of IFI borrowers seriously. It presents a new model of the financial relations between an IFI and a borrowing government that explicitly takes into account the latter’s domestic political constraint. As in the real world, country ownership in this model is constrained by the influence of SIGs. The government makes all relevant economic policy decisions. Its political support within the country is a function of broad social welfare (think of it as being determined by economic growth) and the political contributions of the SIG to the incumbent’s private coffers, a la Helpman and Grossman.⁹ These contributions are used for political campaigning or other personal uses of the politicians but do not enter the government’s budget. The IFI is a benevolent institution representing the interests of the world as a whole. It aims to reduce economic policy distortions in the assistance-receiving country by offering economic assistance contingent on the adoption of distortion-lowering policies.¹⁰ Both increased assistance and less-distorting policies directly enhance the general public’s welfare and indirectly strengthen political support for the government. Special interests, on the other hand, benefit from more-distorting

⁷ Dalmazzo and de Blasio (2001) focus on the influence which rents from oil wealth exert on self-interested governments.

⁸ IMF Guidelines on Conditionality, 1979 (Guideline 4). In IMF (2001a).

⁹ This is the typical formulation in the economics branch of the political economy literature. See Grossman and Helpman (1994 and 2001) and Dixit, Grossman and Helpman (1997). The political science branch also considers influence-buying by lobbyists achieved through information-dissemination and analysis.

¹⁰ While in reality the terms and conditions of Fund financing are determined following extensive negotiations with the authorities, we follow the common-agency approach of Bernheim and Whinston (1986) which assumes that the Fund makes take-it-or-leave-it offers to the government.

economic policies. They offer financial contributions that directly raise political support for the government in return for policies that are more distorting.¹¹

In game-theoretic terms, the government serves as a common agent to IFI and domestic interests, whereby the principals possess opposing objectives. The outcome of this game, described by a truthful (or compensating) Nash equilibrium, reveals the government's choice of economic policies and the magnitude of the IFI's economic assistance package.¹² Importantly, it sheds new light on a number of issues that have been raised in recent debates on IFI reforms (see, e.g., Meltzer Commission, 2000). The key insight is that the Fund's financing and the conditionality attached to it change the incentives of the borrowing government and alter the political economy equilibrium in the recipient country. Even if universal country ownership is impossible to achieve, IFI assistance can be used to tip the hands of reformers in the country and sustain reforms, despite the weakened opposition of SIGs (Vreeland, 2000). In fact, IFI loans affect the recipient governments' incentives and policies even if they are granted unconditionally.

The first issue of interest concerns the effectiveness of conditionality in IFI economic assistance programs. This issue is particularly important in light of recent reports on IFI reforms that question the effectiveness of IFI conditional assistance programs. Our model permits a simple diagrammatic representation of conditional and unconditional economic assistance programs that reveals not only the respective choices in economic policies and amount of assistance, but also in economic welfare of IFI, domestic government, and domestic general public. Economic policy distortions are definitely lower when assistance is conditional rather than unconditional. Conditional assistance is also superior to unconditional assistance from the perspective of the IFI that represents the entire world's (including the recipient country's) economic interests. Political support for the recipient domestic government, on the other hand, is always larger when assistance is unconditional rather than conditional. Furthermore, there is no guarantee that the general public of the assistance-receiving country is better off under conditional assistance. Accordingly, the model suggests an explanation of why developing countries (and their representatives on IFI boards) have typically resisted the expansion of conditionality in past debates.

¹¹ Whereas this paper views the government as a unitary actor subject to pressure by *private* special interest groups, Drazen's (2001) thoughtful paper develops a model of IFIs in which the government must contend with domestic veto players. These are constitutional and institutional actors that influence policy making from *within* government. The number and power of veto players depends on a country's political and constitutional organization (see Tsebelis, 2001a-b). Both models provide useful insights on ownership and conditionality.

¹² A truthful (or compensating) equilibrium is one in which agents' contribution and assistance schedules accurately reflect their valuations of the principal's actions. See Helpman and Grossman (1994, 2001) for more details.

A second issue addressed by our model concerns the impact of the assistance-receiving country's features on the specifications of the IFI's assistance package. Countries differ from each other with respect to the general public's influence on political support for the government, the benefits of distortions to the interest group, the harm of distortions to the general public, and the benefits from assistance payments to the general public. The model yields clear-cut relationships between the degree of policy distortions adopted by the government and the mentioned features of the country. On the other hand, there are no definite relationships between the amount of assistance received and these country features. If, for example, the general public's welfare is more important to the political support of the government (i.e., the government is more "representative"), economic policies will definitely be less distorted but the amount of assistance received might be larger or smaller than for a country in which the government pays less attention to public welfare. Consequently, even though the IFI offers more assistance to a given country with given features if policies are less distorted, countries with lower policy distortions do not necessarily receive more assistance than countries with more policy distortions, when comparisons are drawn across different countries.

Changes in the features of the assistance-providing IFI, on the other hand, have clear-cut effects on both the amount of assistance received and the degree of policy distortions adopted. The paper emphasizes two IFI features: their preferences for the assistance-receiving country relative to the rest of the world and the IFI member countries' cost of financing the assistance package. Whenever a change in features results in lower policy distortions, it will be accompanied by more economic assistance.

The rest of the paper is structured as follows. Section II outlines the model. As an intuitive introduction to a political economy model with interest groups, Section III analyzes the domestic political equilibrium in the absence of any IFI assistance. Section IV analyzes unconditional assistance. Section V examines the political equilibrium under conditional assistance, expressing the economy's policy distortion level and the IFI's assistance paid. Section VI highlights various aspects of the model: the relevance of the cost of financing assistance and of the IFI's preferences; and the impact of various country-specific features on equilibrium policies and assistance. Section VII contains concluding remarks.

II. THE MODEL

Consider an economy in which economic policies are shaped by the interactions of three different players: an incumbent domestic government (G), a domestic interest group (V), and an international financial institution (IFI). The incumbent government decides on which policies to adopt. Its choices, however, are affected by the interest group's support of the government, as well as the IFI's economic assistance policy. IFI assistance to the country takes the form of grants or loans of varying degrees of subsidization. In this paper this is taken as given. The IFI can provide economic assistance conditional on the domestic government's pursuit of 'desirable' economic policies or without imposing such conditionality. Either way, the IFI's assistance program influences the government's policy

choices. The economy's net welfare, after IFI assistance has been received and repaid, is given by:

$$Y(\omega, T; b) = W(\omega, T) - \frac{1 + \beta}{1 + r^*} T \quad (1)$$

where $\omega \geq 0$ denotes an index of policy-generated distortions, T measures the flow of IFI assistance, $\beta \geq -1$ is the net rate of interest charged by the IFI on its loans, and $r^* > 0$ is a discount rate which equals the market interest rate for private loans. The first term on the right-hand side, $W(\omega, T)$, expresses the country's welfare before any repayment of the assistance. How much has to be repaid to the IFI is expressed by the second term. When economic assistance is provided as a grant, $\beta = -1$ and the second term disappears. If $-1 < \beta < r^*$, on the other hand, then assistance takes the form of a subsidized loan where, from the borrower's perspective, the degree of subsidy depends on the market interest rate it faces. Repayment is required, but the amount repaid is less than it would be in the private market. We let $b \equiv (1 + \beta)/(1 + r^*)$ denote the rate of assistance repayment, so that $(1 - b)$ is the subsidy rate on IFI loans.

Given the amount of economic assistance, T , the economy's net welfare is maximized when the economy is distortion-free, $\omega = 0$. Welfare declines at an increasing rate as the distortion index rises, implying that $W_\omega < 0$ and $W_{\omega\omega} < 0$. The flow of economic assistance, in turn, benefits the recipient country at a decreasing rate, such that $W_T > 0$ and $W_{TT} < 0$.¹³ Furthermore, the effectiveness of assistance is assumed to diminish or remain constant with the degree of distortions, making $W_{\omega T} \leq 0$.

The domestic government's political support depends, as in Grossman and Helpman (1994), on the general welfare of its people and financial support from the interest group. The interest group, in turn, is assumed to benefit from economic policies that create distortions and, therefore, is willing to pay for heightening these distortions. It tenders a contribution schedule, $C(\omega)$, to its government, making its financial contributions contingent on the government's choice of policy-created distortions. The government's objective function is:

$$G(\omega, T; a, b) = C(\omega) + a[W(\omega, T) - bT], \quad (2)$$

where $a \geq 0$ is a parameter that reflects the government's concern for (dependence on) the welfare of the general public. When a country's political institutions are weak, the value of a tends to be low. When the subsidy element of economic assistance is large, the value of b tends to be low. The government will not accept assistance unless $W_T > b$.

¹³ Foreign assistance is assumed to directly benefit social welfare in the recipient country. We abstract from important problems which arise when governments are captured by special interests and intermediate foreign assistance in inefficient ways. This problem with foreign assistance is highlighted by Adam and O'Connell (1999) in a model in which the government uses its coercive powers to redistribute resources to its favorite groups.

The interest group gains from distorting policies and is willing to pay for them. Its objective function is:

$$V(\omega) = U(\omega) - C(\omega) \quad (3)$$

where the group's welfare before contributions, $U(\omega)$, is assumed to rise at a decreasing rate with the degree of distortions; that is $U_\omega > 0$, $U_{\omega\omega} < 0$.¹⁴ We assume $U_\omega(0) + aW_\omega(0,0) > 0$, which guarantees that the incumbent government selects a positive level of policy distortions in the absence of IFI assistance.

The IFI is assumed to be a costless, public-interest institution that cares about the net welfare of both the assistance-receiving country and the assistance-financing rest of the world, where welfare measures account for repayment of the concessional loan.¹⁵ The rest of the world serves as the creditor country that provides the IFI with financial resources, in form of grants or subsidized loans. The IFI makes these resources available at cost and is always repaid. The IFI chooses the amount of assistance, T , but treats the rate of assistance repayment b as exogenous, being determined by conditions in the capital market, reflected in the value of r^* , and the preferences of its creditors, as reflected in the value of β . We also let $\gamma \geq 0$ denote the weight of the borrowing country in the IFI's objective function. If $\gamma = 0$, the IFI is an instrument of creditors alone; if $\gamma \geq 1$, the IFI cares at least as much for the assistance-receiving country as for the rest of the world. The IFI's objective function is given by:

$$I(\omega, T; \gamma, b) = \gamma Y(\omega, T; b) + Y^*(\omega, T; b) = \gamma W(\omega, T) + W^*(\omega, T) + (1-\gamma)bT. \quad (4)$$

In equation (4), $Y^*(\omega, T; b) = W^*(\omega, T) + bT$ is net welfare in the rest of the world, being the sum of gross welfare $W^*(\omega, T)$ after the transfer but before repayment and the net present value of repayment bT . Note that welfare in the rest of the world may depend on the degree of distortion in the country in question as well. A more distorted, less prosperous economy may have systemic implications by lowering welfare for its trading partners. We assume that $W_\omega^* \leq 0$ and $W_{\omega\omega}^* \leq 0$. When economic assistance is provided, the gain to the recipient

¹⁴ In Section VI.B., we will allow the interest group's benefits from distortions to vary across countries.

¹⁵ Other assumptions can be entertained regarding the objectives of IFIs. "Hard core" public choice analyses of the IMF typically portray it as a budget maximizer (Vaubel, 1991, 1996). Our specification of the IFI's objective follows recent public choice analyses of the Fund that view it as a pure public interest institution (Willett, 2000). See also Martin (2000).

country, $W_T > 0$, must be weighed against the loss of the creditor country, $W_T^* < 0$.¹⁶ After the subsidized loan is paid back, the net payment is zero for the entire world.

III. POLITICAL EQUILIBRIUM IN THE ABSENCE OF IFI ASSISTANCE

This section examines informally how a country's political equilibrium of economic policy distortions is determined in the absence of any IFI involvement. Finding this equilibrium, denoted by ω^j , serves two purposes. First, ω^j represents a benchmark against which distortion equilibria are compared when the IFI provides either unconditional, ω^o , or conditional, ω^l , assistance. Second, the magnitude of conditional assistance offered by the IFI hinges on the level of distortions in the absence of IFI assistance.

With the IFI out of the picture, the government's choice of economic policies is influenced by the domestic interest group only. As more fully explained in Grossman and Helpman (1994), the interest group presents the incumbent government with a contribution schedule, $C(\omega)$. Given this schedule, the government chooses a level of policy distortions, ω^j , that maximizes its own welfare which, in the absence of IFI assistance, is given by $G(\omega; a) = [C(\omega) + aW(\omega, 0)]$. In offering its contribution, the interest group must ensure that the government is willing to accept it, meaning that the government remains as well off with the offered contribution as without it; that is, $[C(\omega^j) + aW(\omega^j, 0)] = aW(0, 0)$, since the government chooses non-distorting economic policies to maximize its welfare in the absence of interest group influence. Finally, the equilibrium must not waste resources. In other words, ω^j must maximize the joint utility of interest group and government, given by $\{[U(\omega) - C(\omega)] + [C(\omega) + aW(\omega, 0)]\}$.

The political equilibrium in the absence of IFI assistance is portrayed in Figure 1. The government's welfare contours in the (ω, C) plane, labeled G_j , are upward-sloping at an increasing rate: $\partial C/\partial \omega \big|_{dG=0} = -aW_\omega > 0$ and $\partial^2 C/\partial \omega^2 \big|_{dG=0} = -aW_{\omega\omega} > 0$. Raising the level of policy distortions lowers the public's welfare, requiring successively larger contributions by the interest group to keep the incumbent government on the same welfare contour. The interest group's welfare contours, labeled V_j , on the other hand, are upward-sloping at a decreasing rate: $\partial C/\partial \omega \big|_{dV=0} = U_\omega > 0$ and $\partial^2 C/\partial \omega^2 \big|_{dV=0} = U_{\omega\omega} < 0$. The interest group makes additional payments as it gains from a more distorted economy, but marginal contributions are declining as the marginal gains from distortions are diminishing. Higher-valued subscripts of the G_j and V_j contours imply greater welfare for government and interest group, respectively. Joint utility of interest group and government is maximized along the E_0E_1 locus, where the two sets of welfare contours are tangent. This locus represents the set of efficient bargains between the two players, as all mutually beneficial political trades

¹⁶ Hence, the IFI's opportunity cost of providing assistance to the recipient country is $-W_T^*$.

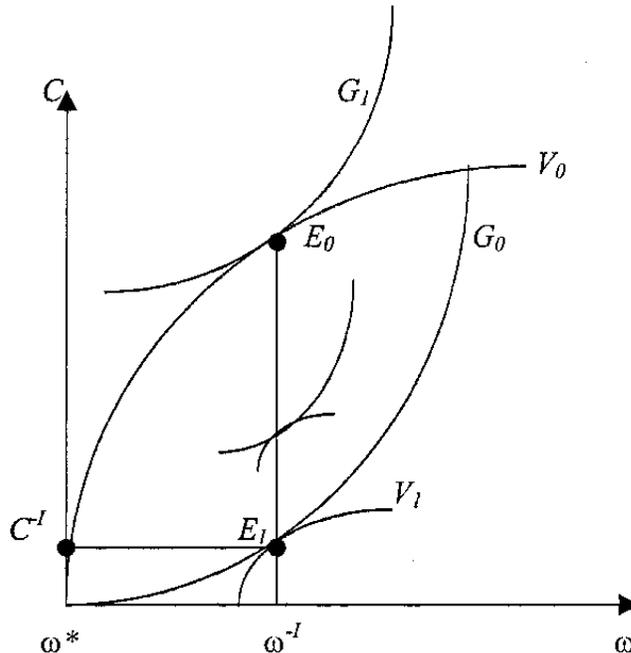
between the interest group and government have been exhausted. Provided $U_{\omega}(0) + aW_{\omega}(0,0) > 0$, there exists a unique positive equilibrium level of policy distortion in the absence of IFI assistance, ω^I , the solution to:

$$U_{\omega}(\omega^I) = -aW_{\omega}(\omega^I, 0). \quad (5)$$

In equilibrium, the marginal benefit to the interest group from increased distortions equals the marginal cost to the government, measured by the decline in political support from the general public. The amount of contributions paid by the lobby, C^I , in turn, is just enough to make the government indifferent between ω^I and its choice of policies in the absence of an interest group, ω^* . As there is only one organized interest group in the economy, the government's choice of policies in the absence of lobbying is free of any distortions, making $\omega^* = 0$. Accordingly, equilibrium is reached at point E_I , where the G_0 welfare contour is tangent to the V_I contour. The equilibrium contribution level of the interest group, therefore, is $C^I = a[W(0,0) - W(\omega^I, 0)] > 0$.

As noted by Grossman and Helpman, the interest group's equilibrium contribution is proportional to the deadweight loss generated by the second-best policy choice, where the government's regard for social welfare, as expressed by the value of a , serves as the factor of proportionality. The government's equilibrium welfare, indicated by contour G_0 , is the same as in the absence of interest group activity. In the absence of competition from other interest groups, the single organized group appropriates the entire surplus from its relationship with the government, measured by distance E_0E_I . The lobby's net utility in the absence of IFI assistance is $B_V^I = U(\omega^I) - a[W(0,0) - W(\omega^I, 0)]$, prevailing along welfare contour V_I .

Figure 1. Equilibrium with No IFI Assistance



IV. UNCONDITIONAL ASSISTANCE

We now will assess the effectiveness of IFI economic assistance on policy distortions under two alternative assumptions. The present section is dealing with *unconditional* assistance. The IFI provides economic assistance, but its offer is not contingent on the receiving government's pursuit of distortion-reducing economic policies. The IFI does, however, take into account that the government's policies might react to the availability of assistance. Given these reactions, the IFI offers the amount of assistance that maximizes its own welfare. Section IV will deal with *conditional* IFI assistance. In this case, the IFI makes its offer of assistance contingent on the incumbent government's pursuit of distortion-reducing economic policies. A simple diagram, portrayed in Figure 2, will enable us to compare the amount of assistance, the level of distortions emerging, and the effectiveness (welfare) of the IFI under the alternatives of conditional and unconditional assistance.

Without any IFI assistance, the domestic government's economic policy choice reflected the influence of the domestic interest group only. As shown in the preceding section, the policy choice is ω^T . When the IFI provides assistance, $T > 0$, but this assistance is not contingent on the reduction of existing distortions, the government takes this aid simply as given. If the effectiveness of this assistance is diminished as the magnitude of distortions rises, $W_{\omega T} < 0$, the government's choice of policies, ω^0 , is sensitive to the amount of assistance received; that is, $\omega^0 = \omega^0(T)$. When the IFI, in turn, makes its decision on how much unconditional assistance to provide, T^0 , it maximizes its own welfare, as expressed by (4), with respect to T , accounting for the reaction of the government to changing levels of assistance. In other words, the IFI acts as a Stackelberg leader when choosing the provision of unconditional economic assistance.

The political equilibrium with unconditional assistance can be described as the outcome of a three-stage non-cooperative game. In stage one, the IFI decides on the total amount of economic assistance. In stage two, the country's interest group chooses its contribution schedule. In stage three, the government selects the distortion-creating economic policies. Working backward, we first focus on stages two and three to determine the government's choice of economic policy distortions in the presence of an influence-seeking interest group, given the amount of assistance made available by the IFI. Then, we are moving to stage one to find the IFI's choice of assistance, given the government's policy response to alternative assistance levels.

Given T , the combination (C^0, ω^0) represents a subgame-perfect Nash equilibrium of the distortion-causing economic policy game if:

- a. C^0 is feasible;
- b. ω^0 maximizes the government's objective function given the interest group's contribution schedule, implying that ω^0 maximizes $C^0(\omega) + a[W(\omega, T) - bT]$;

- c. ω^0 maximizes the joint welfare of the interest group and the domestic government; that is, ω^0 maximizes $\{U(\omega) - C^0(\omega)\} + \{C^0(\omega) + a[W(\omega, T) - bT]\}$;
- d. there exists a level of distortion $\underline{\omega}$, that maximizes $C^0(\omega) + a[W(\omega, T) - bT]$ such that $C^0(\underline{\omega}) = 0$.

As more fully explained in Grossman and Helpman (1994, p.839), condition (a) restricts the interest group's contribution to be nonnegative and no greater than its resources. Condition (b) states that the government chooses a level of distortion that maximizes its own welfare given the contribution schedule offered by the interest group. Condition (c) stipulates that the equilibrium policy choice maximizes the joint welfare of government and interest group. If this were not true, the interest group could offer the government alternative contribution schedules that are mutually beneficial. Finally, condition (d) requires that there exists a level of policy distortion that elicits zero contribution from the interest group and at which the government is just as well off as at ω^0 .

Conditions (b) and (c), respectively, imply that:

$$C^0_{\omega}(\omega^0) + aW_{\omega}(\omega^0, T) = 0 \quad (6)$$

$$U_{\omega}(\omega^0) - C^0_{\omega}(\omega^0) + C^0_{\omega}(\omega^0) + aW_{\omega}(\omega^0, T) = 0. \quad (7)$$

It follows from (6) and (7) that $U_{\omega}(\omega^0) = C^0_{\omega}(\omega^0)$. As Grossman and Helpman show, this condition implies that the interest group's contribution schedule is locally truthful (or compensating) around ω^0 ; that is, it reflects the true preferences of the interest group in the neighborhood of equilibrium. It also follows that:

$$U_{\omega}(\omega^0) = -aW_{\omega}(\omega^0, T), \quad (8)$$

which represents the solution to the second and third stage of the policy game. Distortions are raised to a level at which the marginal benefit to the interest group equals the marginal loss in public support for the government. This was shown in Figure 1 for the special case that $T = 0$.

Equation (8) reveals that the incumbent government's choice of distorting economic policies hinges on the amount of economic assistance received from the IFI as long as $W_{\omega T} \neq 0$. Given this assumption, the following observations can be made. First, the domestic government reacts to the magnitude of foreign assistance even though assistance is provided unconditionally. Whether distortions are reduced or raised following an increase in unconditional foreign assistance depends on the cross-partial derivative $W_{\omega T}$. The "normal" case, depicted in Figure 2, assumes $W_{\omega T} < 0$; that is, the effectiveness of foreign assistance is

reduced the more distorted the economy.¹⁷ Using (8), the government's policy response to a change in assistance is given by

$$\frac{d\omega^o}{dT} = \frac{-aW_{\omega T}(\omega^o, T)}{U_{\omega\omega}(\omega^o) + aW_{\omega\omega}(\omega^o)} < 0 \quad (9)$$

and reflected in the *RR* curve of Figure 2.¹⁸ Second, the government's policy response to a change in the amount of unconditional assistance is independent of the form of assistance, grants or loans. The response depends on the total amount of assistance only. Third, the interest group's contribution in the presence of assistance must be sufficient to make the government indifferent between the equilibrium policy $\omega^o(T)$ and the policy it would choose in the absence of lobbying, $\omega = 0$. Hence, $C(\omega^o, T) = a[W(0, T) - W(\omega^o, T)] > 0$ since social welfare is higher in the absence of lobbying. Note that, while IFI assistance induces an improvement in government policies, it does not necessarily lead to a reduction in the interest group's political contributions.¹⁹

In stage one of the game, the IFI decides on the amount of economic assistance to the country under consideration. It maximizes its objective function, as stated in (4), with respect to T , while taking account of the government's policy reaction, as stated in (9). Figure 2 portrays the IFI's equilibrium choice of unconditional assistance, T^o , and the government's corresponding choice of policy-generated distortions, ω^o . Political equilibrium is attained at point B, where the government's policy response function, *RR*, is tangent to the IFI's welfare contour I_o .

Figure 2 portrays two sets of welfare contours in the (ω, T) plane. First, there are the welfare contours of the domestic government, given the contribution schedule of the interest group. They are denoted by G_j , where higher subscripts indicate greater government welfare. The slope expression for the government's welfare contours is given by $-(U_{\omega\omega} + aW_{\omega\omega})/[a(W_T - b)]$, where $U_{\omega\omega} > 0$, $W_{\omega\omega} < 0$, and $W_T > b \geq 0$ in the relevant range of T . The slope is negative for low values of ω and positive for high values of ω . The steepness of the slope also depends on the subsidy component of economic assistance: the larger the subsidy component (the smaller the

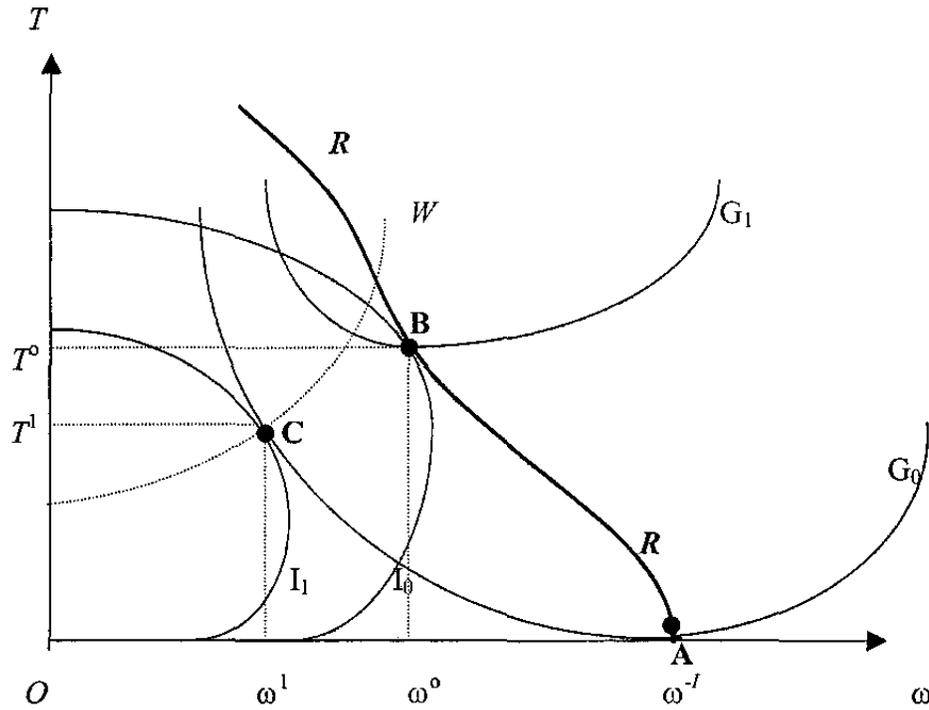
¹⁷ Clearly, more assistance would be welfare-immizerizing if the effectiveness of assistance increased with the level of distortions: $W_{\omega T} > 0$ implies $d\omega^o / dT > 0$.

¹⁸ It is implicitly assumed that the government has no access to private international capital markets.

¹⁹ This can be seen from differentiating $C(\omega^o, T)$ with respect to T , where ω^o depends on T , as expressed in (9).

value of b), the flatter is the welfare contour. The slope is zero along the government's policy reaction curve, RR , where equation (8) is satisfied.

Figure 2. Equilibrium with Conditional and Unconditional IFI Assistance



Second, there are the welfare contours of the IFI, denoted by I_j , where again higher subscripts indicate greater IFI welfare. The slope of these welfare contours is given by

$$-(\gamma W_\omega + W_\omega^*) / (\gamma W_T + W_T^* + (1-\gamma)b), \text{ where } W_T > 0, W_T^* < 0, \text{ and } W_\omega^* \leq 0, \text{ such that the}$$

numerator is always positive. Concerning the denominator, $[\gamma W_T + W_T^* + (1-\gamma)b]$ will be positive for sufficiently low values of T , but declines and eventually turns negative with rising T .²⁰ Accordingly, the IFI's welfare contours are backward bending.

Figure 2 shows that, in the absence of any economic assistance, a government chooses economic policies that result in distortion index ω^{-I} . The corresponding level of welfare for the government is given by G_0 . Once the IFI provides unconditional economic assistance, it

²⁰ If economic assistance were totally unrelated to distortions and the IFI showed no special preference for the assistance-receiving country, it would provide assistance such that $W_T + W_T^* = 0$.

is in the interest of the government to reduce economic distortions along the RR locus. There are two important factors that influence the government's response to economic assistance, as revealed by (9). First, there is the government's concern for the welfare of the general public, as expressed by the value of a ; the less its concern for the general public, the less it reduces distortions as more assistance is received. Second, there is the impact of distortions on the effectiveness of economic assistance, as expressed by the value of $W_{\omega T} < 0$. The more detrimental distortions are to the effectiveness of economic assistance, the more they will be reduced as more assistance is received.

The IFI's optimal choice of unconditional economic assistance is T^o , resulting in distortions index ω^o . Given the incumbent government's policy reaction curve, RR , the IFI chooses a level of assistance that puts it on the highest attainable IFI welfare contour, namely on I_o at point B .²¹

V. CONDITIONAL ASSISTANCE

We now turn to evaluating the effects of *conditional* assistance. The IFI offers assistance under the condition that economic policy-generated distortions are reduced. The domestic government now deals with two principals: the domestic interest group and the IFI. Each principal offers a payment schedule, contingent on the government's policy choice. The interest group tenders a financial contribution schedule that relates contributions positively to the degree of distortions created by economic policies. The IFI, in turn, tenders an economic assistance schedule that offers more assistance for a less-distorted economy. The interest group's contribution benefits the government directly; the IFI's financial package, on the other hand, benefits the government only indirectly, as more assistance results in greater social welfare.

When the IFI offers conditional economic assistance, it makes the magnitude of its assistance contingent on economic policies and associated distortions implemented by the government. It, thereby, joins the domestic interest group as another principal in a common-agency situation. The aims of the two principals are starkly conflicting, however. The interest group pursues more distortions, the IFI pursues fewer distortions. The incumbent government chooses the degree of actual distortions.

The provision of conditional assistance can be described as a two-stage game. The IFI decides on its economic assistance schedule and the interest group chooses its contribution

²¹ Note that one cannot assure that the solution is unique without imposing additional restrictions. The RR curve might be tangent to the same IFI welfare contour more than once. Nonetheless, all these equilibria under unconditional assistance will be associated with greater distortions and more assistance than equilibria in the presence of conditional assistance.

schedule in first stage, while the incumbent government selects the degree of policy distortions in the second stage. Again following Grossman and Helpman (1994, p.839), the choices (C^I, T^I, ω^I) represent a subgame-perfect Nash equilibrium of the economic policy game if and only if:

- a'. C^I and T^I are feasible;
- b'. ω^I maximizes the government's objective function given the interest group's contribution and the IFI's assistance schedules, implying that ω^I maximizes $C^I(\omega) + a\{W[\omega, T^I(\omega)] - bT^I(\omega)\}$;
- c'. ω^I maximizes the joint welfare of interest group and domestic government; that is, ω^I maximizes $[U(\omega) - C^I(\omega)] + C^I(\omega) + a\{W[\omega, T^I(\omega)] - bT^I(\omega)\}$;
- d'. ω^I maximizes the joint welfare of IFI and domestic government; that is, ω^I maximizes $\gamma W[\omega, T^I(\omega)] + W^*[\omega, T^I(\omega)] + C^I(\omega) + aW[\omega, T^I(\omega)] + (1 - \gamma - a)bT^I(\omega)$;
- e'. there exist levels of distortions, ω^{-V} and ω^{-I} , that maximize $C^I(\omega) + a\{W[\omega, T^I(\omega)] - bT^I(\omega)\}$ such that $C^I(\omega^{-V}) = 0$ and $T^I(\omega^{-I}) = 0$, respectively.

In addition to the restrictions on the interest group's contribution schedule discussed earlier, condition (a') requires the IFI's assistance schedule to be nonnegative and no greater than the IFI's resources. Condition (b') states that, given the contribution schedule offered by the interest group and the assistance schedule offered by the IFI, the government sets policies to maximize its own welfare. Conditions (c') and (d') stipulate that equilibrium policies must maximize the joint welfare of government and interest group and of government and IFI, respectively. If this were not true, the interest group or IFI could offer the government alternative contribution and assistance schedules that would be mutually beneficial. Both interest group and IFI must also worry about what policy would be chosen if their respective contribution and assistance payments were sufficiently low that the government opts for policies that disregard their respective interests. Hence, as Grossman and Helpman (1994, p.845) indicate, condition (e') requires the existence of distortions, ω^{-I} and ω^{-V} , that respectively elicit zero contributions from the interest group and zero assistance from the IFI, and that the government finds equally attractive as the distortion level in equilibrium, ω^I , when contributions and assistance payments are positive.

Assuming interior solutions, conditions (b'), (c'), and (d'), respectively, imply the following first-order necessary conditions, which are evaluated at the equilibrium value of ω^I for truthful Nash equilibrium schedules T^I and C^I :

$$C_{\omega}^l + aW_{\omega} + a(W_T - b)T_{\omega}^l = 0 \quad (10)$$

$$U_{\omega} - C_{\omega}^l + C_{\omega}^l + aW_{\omega} + a(W_T - b)T_{\omega}^l = 0 \quad (11)$$

$$\gamma(W_{\omega} + W_T T_{\omega}^l) + (W_{\omega}^* + W_T^* T_{\omega}^l) + C_{\omega}^l + a(W_{\omega} + W_T T_{\omega}^l) + (1 - \gamma - a)bT_{\omega}^l = 0. \quad (12)$$

Substitution of (10) into (11) implies, just as in the absence of IFI assistance, that $U_{\omega}(\omega^l) = C_{\omega}^l(\omega^l)$. The contribution schedule is again locally truthful, equating the interest group's marginal benefit from more distortions to the group's marginal cost in terms of additional contribution payments.

A. Choice of Equilibrium Economic Policies

Our immediate objective is to determine the value of the economic policy distortion index that comes about when the IFI offers conditional assistance and a domestic interest group resists the conditions under which assistance is provided. We start with substituting (10) into (12) to obtain:

$$T_{\omega}^l = -\frac{\gamma W_{\omega} + W_{\omega}^*}{\gamma W_T + W_T^* + (1 - \gamma)b}. \quad (13)$$

As was explained in the section on unconditional IFI assistance, the right-hand side of (13) expresses the slope of the IFI welfare contour. It indicates the rate at which the IFI is willing to pay more assistance for a small reduction in policy distortions. This IFI assistance schedule is also locally truthful.

Next, we substitute $U_{\omega}(\omega^l) = C_{\omega}^l(\omega^l)$, as well as (13) into (10) to obtain:

$$U_{\omega} = a \frac{W_{\omega}(-W_T^* - b) + W_{\omega}^*(W_T - b)}{\gamma W_T + (1 - \gamma)b + W_T^*} > 0, \quad (14)$$

where (13)-(14) are evaluated at the political equilibrium $[(\omega^l, T^l(\omega^l), C^l(\omega^l))]$. Equation (14) is satisfied when the government's willingness to accept additional assistance is equal to the IFI's willingness to give additional assistance for a small reduction in the distortion index. In terms of Figure 2, a welfare contour of the government must be tangent to a welfare contour of the IFI. As shown earlier, the slope of the government's welfare contour equals $-(U_{\omega} + aW_{\omega})/[a(W_T - b)]$, while the slope of the IFI's welfare contour equals $-(\gamma W_{\omega} + W_{\omega}^*)/[\gamma W_T + W_T^* + (1 - \gamma)b]$, such that in equilibrium:

$$\frac{U_{\omega} + aW_{\omega}}{a(W_T - b)} = \frac{\gamma W_{\omega} + W_{\omega}^*}{\gamma W_T + W_T^* + (1-\gamma)b}. \quad (15)$$

As can be seen from Figure 2, equation (15) implies that joint welfare of domestic government and IFI is maximized. Such a maximum must occur in the range of ω where both the government's and the IFI's welfare contours are negatively sloped. This implies that, evaluated at the equilibrium distortion index of ω^I , it must be that $[U_{\omega} + aW_{\omega}] > 0$ and $[\gamma W_T + W_T^* + (1-\gamma)b] < 0$.²² One also can easily see that equation (15) reduces to the equilibrium condition stated in equation (14).

B. Equilibrium Level of IFI Assistance

Figure 2 portrays the conditional assistance solution, T^I , explicitly. We are now going to show analytically how the equilibrium value of IFI assistance is determined. Our starting point is the last of the necessary and sufficient conditions for a subgame-perfect Nash equilibrium, namely the requirement that there exists a distortion level, ω^I , such that the IFI offers no assistance but the incumbent government is equally well off as at the equilibrium with conditional assistance. If the IFI did not provide any assistance, $T = 0$, the government would choose economic policy ω^I . Accounting for truthful contribution offers from the domestic interest group, the government finds itself on welfare contour G_o . Hence, in the absence of any involvement by an IFI, the equilibrium is given at point A in Figure 2. When the IFI offers economic assistance contingent on the adoption of less-distorting economic policies, its truthful assistance schedule is reflected by the I_I contour. The IFI offers additional assistance to the government for every change in policy by the amount of increase in the IFI's welfare.²³ Given this assistance schedule, the government selects economic policies that maximize joint welfare of IFI and government, accounting for truthful contributions from its domestic interest group. This is attained at point C in Figure 2.

The equilibrium assistance level is equal to a payment that makes the recipient government indifferent between choosing the policy it would adopt in the absence of assistance, ω^I , and the policy it adopts under the conditional transfer, ω^I . Accordingly,

²² This means that the IFI provides more assistance in situations where assistance lowers distortions than when it does not lower distortions.

²³ Dixit, Grossman, and Helpman (1997, pp.758-9) discuss the properties of a principal's payment function using a similar diagram. They summarize that "the shape of the payment schedule mirrors the shape of the principal's indifference surface."

$$C(\omega^{-I}, B_V^1) + aW(\omega^{-I}, 0) = C(\omega^I, B_V^1) + a\{W[\omega^I, T^I(\omega^I, B_I^1)] - b T^I(\omega^I, B_I^1)\}, \quad (16)$$

where B_V^1 and B_I^1 denote the interest group's and IFI's welfare when the government chooses its economic policies optimally.

The equilibrium contribution level offered by the interest group, in turn, is such as to make the government indifferent between the policy it would adopt in the absence of any lobbying group, ω^{-V} , and the equilibrium policy adopted when contributing, ω^I ; that is:

$$\begin{aligned} 0 + a\{W[\omega^{-V}, T^I(\omega^{-V}, B_I^1)] - b T^I(\omega^{-V}, B_I^1)\} = \\ C(\omega^I, B_V^1) + a\{W[\omega^I, T^I(\omega^I, B_I^1)] - b T^I(\omega^I, B_I^1)\}, \end{aligned} \quad (17)$$

where it should be noted that the government would choose non-distorting policies in the absence of the interest group, implying that $\omega^{-V} = 0$.

Equations (16) and (17) are employed to obtain an implicit solution for the IFI's equilibrium economic assistance amount, T^I . We obtain such a solution by substituting $U(\omega^{-I}) - U(\omega^I) = C(\omega^{-I}, B_V^1) - C(\omega^I, B_V^1)$ into (16), whereby this equality holds if $C(\omega^{-I}, B_V^1) > 0$ and $C(\omega^I, B_V^1) > 0$, as explained in footnote 12 of Grossman and Helpman (1994).²⁴ This substitution yields:

$$W[\omega^I, T^I(\omega^I, B_I^1)] - bT^I(\omega^I, B_I^1) = W(\omega^{-I}, 0) + [U(\omega^{-I}) - U(\omega^I)]/a, \quad (18)$$

which can be solved for T^I .

We now are in a position to compare the effectiveness of conditional IFI assistance with the effectiveness of unconditional IFI assistance. This comparison is greatly facilitated by Figure 2, where point B represents equilibrium under unconditional assistance whereas point C represents equilibrium under conditional assistance. As drawn, the government pursues less distorting policies, the IFI spends less on assistance, and the IFI's welfare is greater when assistance is conditional rather than unconditional. The economic policy-setting government, on the other hand, is better off when assistance is unconditional.

²⁴ In order to show that $C(\omega^I, B_V^1) > 0$, we use (17). First, we note that $\omega^{-V} = 0 < \omega^I$ and $T^I(0, B_I^1) > T^I(\omega^I, B_I^1)$, as one can see from the I_I -locus of Figure 2. Since $[W(\omega, T) - bT]$ rises with T , it must be that $\{W[\omega^{-V}, T^I(\omega^{-V}, B_I^1)] - b T^I(\omega^{-V}, B_I^1)\} > \{W[\omega^I, T^I(\omega^I, B_I^1)] - [b T^I(\omega^I, B_I^1)]\}$ and $C(\omega^I, B_V^1) > 0$. Next, we employ (16) to show that $C(\omega^{-I}, B_V^1) > 0$. Since $C(\omega^I, B_V^1) > 0$, $\omega^I < \omega^{-I}$, and $[W(\omega^I, T) - bT]$ rises with T , it follows that $C(\omega^{-I}, B_V^1) > 0$.

Some of these findings hold always, while others are due to the way the diagram is drawn. First, it is always the case that the IFI is better off and the government is worse off with conditional assistance. Second, it is not impossible that either the amount of assistance or the degree of policy distortions is greater under conditional than unconditional assistance. It is never possible, however, that both amount of assistance and degree of policy distortions is greater under conditional than unconditional assistance. Finally, it should be noted that welfare of the recipient country's general public, measured by $[W(\omega, T) - bT]$, is not necessarily larger under conditional than unconditional assistance. The dashed W-line represents one welfare contour for the country. It is increasing, implying that, along a given contour, assistance must be stepped up to compensate for increasing distortions. As drawn, the country's welfare at point B is less than at point C. But the dashed line running through point C could just as well lie below point B, in which case the country would be better off with unconditional assistance.

Our conclusion that the IFI prefers conditional assistance, while the recipient country's government prefers unconditional assistance points at the source of resistance to strict enforcement of conditionality. If, in addition, the government can argue that its own country's general public might be made worse off by making assistance conditional, the IFI's conditionality approach is prone to being attacked by the representatives of recipient country governments.

VI. IFI AND COUNTRY CHARACTERISTICS AS DETERMINANTS OF IFI ASSISTANCE

A. Cost of Financing Assistance and the IFI's Country Preferences

The IFI's assistance to a given country is financed by the rest of the world. Hence, the rest of the world can be viewed as the donor country of any form of subsidized assistance. The rest of the world's cost consists not just of the total amount of assistance paid by the IFI but also of the cost of raising the necessary revenues. Since this marginal cost of financing assistance to the recipient country, measured by W_T^* , might change over time, we want to determine the impact of such a change on the amount of conditional assistance and the level of policy distortions.

With this goal in mind, we restate the rest-of-the-world's gross welfare functions as $W^*(\omega, T; \mu)$, where $W_\mu^* \leq 0$, $W_{T\mu}^* < 0$, and $W_{\omega\mu}^* = 0$. An increase in μ lowers or leaves constant the rest of the world's welfare, increases its marginal cost of assistance, and has no impact on the relationship between recipient country's distortions and the rest of the world's welfare. As one can see from equation (15), this increase in the marginal cost of providing assistance has no impact on the slope of the G_θ -curve of Figure 2—which reflects the left-hand side of (15)—but it makes the I -curves flatter, as the value of the right-hand side of (15) declines. The new tangency point between the G_θ -curve and an I -curve must lie to the right and below point C. Accordingly, *increased marginal cost of providing assistance results in lower assistance payments and less reduction in distortions of the recipient economy.*

The exactly opposite effects on T^I and ω^I occur when the IFI increases its preference for the recipient country, as expressed by an increase in the value of γ . The G_0 curve remains undisturbed, while the I welfare contours, at a given value of ω , become steeper, as can be seen from (15). Accordingly, *shifting the IFI's preference in favor of the recipient country leads to more conditional assistance and lower distortions*, as the equilibrium lies on the G_0 -curve to the left of point C .

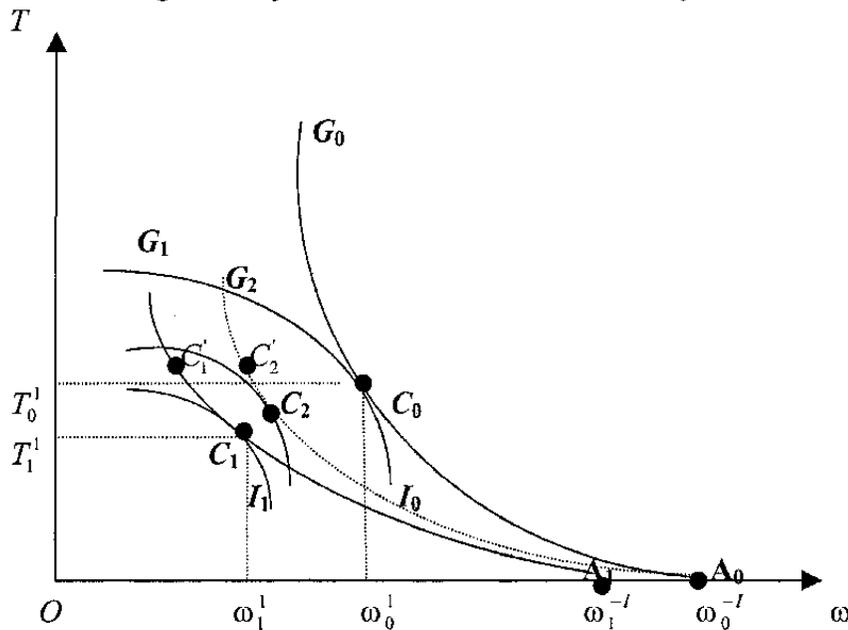
B. Country-Tailored Assistance

The assistance-receiving countries might differ from each other in a variety of ways. Here we highlight four such differences, namely: 1. The government's responsiveness to the general public's welfare; 2. The interest group's gains from distorting policies; 3. The damage of distorting policies to the general public's welfare; and 4. The effectiveness of assistance payments to the economy's performance. This subsection is going to show that differences in country characteristics translate into well-defined differences in economic policy choices. On the other hand, there exists no clear relationship between country characteristics and the amount of conditional assistance received from the IFI. Specifically, *a country ends up with less distorting economic policies when: 1. Its government cares more about the general public's welfare; 2. Its interest group gains less from distortions; 3. The distortions are more damaging to the general public; and 4. The benefits from assistance payments are more pronounced*. On the other hand, the amount of assistance received by a government that cares more for the public might be larger or smaller than what is received by a government that cares less for the public, etc. Hence, *the fact that the IFI is willing to pay more assistance to a given country for reducing its distortions does not mean that all countries with lower distortion levels end up receiving more assistance*. Each country's situation must be evaluated separately.

To support our assertions, we first consider the two cases in which either the government is more responsive to the public or the interest group gains less from distortions. The first case means that the parameter a is larger in value. For the second case, we restate the interest group's utility function as $U(\omega; t)$, where $U_t < 0$ and $U_{\omega t} < 0$ for all $\omega > 0$. An interest group's total and marginal gains from distorting policies are smaller as the value of t rises. Given this specification, we evaluate comparative statics results with the help of Figure 3 and equations (5) and (15). Figure 3 shows an initial equilibrium under conditional assistance at point C_0 , where the G_0 - and I_0 -curves are tangent. Given initial values of a_0 and t_0 , the IFI pays conditional assistance of T_0^I and the government pursues policies that entail a distortion index of ω_0^I . If the IFI did not provide any assistance, the distortion index would be ω_0^{-I} at point A_0 . If either a rises to a_1 or t rises to t_1 , there are two effects on the G_0 -curve. First of all, point A shifts left to A_1 , since the distortion index in the absence of IFI assistance declines to ω_1^{-I} , as one can see from (5). In other words, if either the government pays more attention to the general public's welfare or the interest group gains less from distorting economic policies, the distortion index in the absence of any assistance would be lower. Second, the G_0 -curve becomes flatter, as one can see from the left-hand term of (15), which reflects the

slope of the G_0 -curve. The amount of assistance the government must receive to lower distortions is smaller when it pays more attention to the public or the interest group gains less. The right-hand side of equation (15), which expresses the slope of the I_1 -curve, on the other hand, is not affected by a change in either the government's responsiveness to public welfare or the interest group's gains from distortions. In other words, the IFI's willingness to offer assistance for lower distortions does not depend on the assistance-receiving country's *internal politics*. The new political equilibrium is attained at point C_1 , where the G_1 -curve is tangent to the I_1 -curve. The distortion index, ω_1^1 must be lower when either $a_1 > a_0$ or $t_1 > t_0$. Concerning the amount of assistance provided by the IFI, the diagram shows that $T_1^1 < T_0^1$. This, however, is not necessarily so. When a or t rise, T will definitely decline at a constant value of ω . But since ω also declines, the IFI offers more T , countering and possibly more than offsetting the first effect.²⁵

Figure 3. Equilibria Under Different Country Characteristics



Next we examine the effects of differences in a country's sensitivity to distortions and in its benefits from economic assistance. For this purpose, we restate the recipient country's welfare function, net of assistance repayments, as $W(\omega, T; \nu, z)$, where $W_\nu < 0$, $W_{\omega\nu} < 0$, $W_{T\nu} = 0$ and $W_z > 0$, $W_{Tz} > 0$, $W_{\omega z} = 0$ for all $\omega > 0$ and $T > 0$. Stated in words, at a higher value of ν , the country's general welfare is lower at a given level of distortions and the marginal loss from increased distortions becomes more pronounced. At a higher value of z , the country is better off at a given assistance level and its marginal gains from additional assistance are

²⁵ These results can be more precisely derived from equations (14) and (18).

stronger. One can see from (5), that an increase in ν lowers ω^I and shifts the G_0 -curve to the left whereas raising z has no impact on ω^I and the intercept of the G_0 curve. Furthermore, an increase in ν , as well as in z reduces the slope of the G - curve at a given ω , as one can see from the left-hand side of (15). This implies that, in terms of Figure 3, an increase in ν again shifts the G_0 curve to G_1 , whereas an increase in z rotates it to the dashed G_2 -line. In contrast to *internal political differences* – discussed in the preceding paragraph – which did not affect the slope of the I -contours, *differences in internal economic conditions* affect the I -loci. Specifically, raising either ν or z makes the I -loci steeper. In other words, if distortions are more detrimental or assistance more beneficial to a country's general welfare, the IFI is willing to give more assistance for a given reduction in distortions. For a higher value of ν , the new equilibrium lies on the G_1 - curve, but above point C_1 such as at point C'_1 . For a higher value of z , the new equilibrium must be on the dashed G_2 -line above C_2 , such as at point C'_2 . Accordingly, in equilibrium, *the economy will definitely be less distorted when distortions are more harmful to the general public or assistance is more beneficial*. The amount of actual assistance received, on the other hand, might be larger or smaller than at the initial equilibrium.

When Michael Bruno served as chief economist of the World Bank, he expressed the position that conditionality is most effective in times of crisis. In other words, the IFI would accomplish a larger reduction in policy distortions during a country's bad times than during its good times. Our model captures at least two types of crises. One is an abrupt decline in general welfare accompanied by increased damage from distortions to the public, as expressed by an increase in ν . The other is a substantial increase in the country's cost of borrowing in the market. As can be seen from equation (1), such an increase in r^* lowers the value of b . As can be seen from the preceding paragraph and equation (19), both types of deterioration in a country's economic condition result in a more substantial reduction in the country's policy distortions, as Bruno had suggested.

VII. CONCLUDING REMARKS

This paper modeled the interactions between an IFI that offers economic assistance, a government that receives this assistance conditional on its choice of policies, and a domestic SIG that loses from implementing conditionality. We formulated these interactions in terms of a common-agency framework. The IFI and domestic interest group have conflicting goals: the former wants a reduction in world welfare-reducing distortions, while the latter favors an expansion of special interest-enhancing distortions. The government, whose goal is to maximize political support, controls the actual level of distortions through its choice of economic policies. The IFI offers economic assistance in return for distortion-reducing policies; the interest group offers financial support in return for distortion-raising policies. At a truthful Nash equilibrium, the government's choice of distortions, the IFI's economic assistance payment, and the interest group's financial support of the government are determined.

The resulting political economy model offers a relatively simple framework for examining a variety of issues concerning the provision of economic assistance by international financial institutions. First, it permits a comparison of the effects of assistance when it is conditional on performance criteria relative to when it is unconditional. With conditional assistance, the distortion level is lower and the IFI achieves its objectives better, but the domestic government, and possibly even the recipient country's general population, are worse off, according to this model. Second, the model suggests that each country's conditional assistance package must be tailored to its special characteristics. The responsiveness of the government to the general public, the strength of interest groups, the effectiveness of economic assistance, and the degree of damage from economic distortions must be accounted for. Also considered must be the impact of the assistance package on the rest of the world. As these characteristics differ across countries, so will the politically optimal economic assistance packages.

Although the model offers numerous specific conclusions, it should be viewed primarily as a framework for dealing with issues surrounding IFI economic assistance provision and less so as a compendium of definite findings. The framework is able to accommodate a variety of adjustments that add more realism at the cost of greater complexity. The simplest type of adjustment consists of changes in the specification of the objective functions of government, interest group, or IFI, while retaining the static nature of the model. For example, the IFI's decision makers might pursue objectives that are not captured by our Benthamite world-welfare function. More complexity would be introduced by making the model explicitly dynamic. For example, economic assistance received today could be assumed to generate additional output in later periods only. Alternatively, the adoption of distortion-reducing policies could be assumed to reduce welfare temporarily before leading to beneficial effects in later periods. Or, the IFI might choose not just how much and in what form to give assistance, but also for how long. Further realism could be gained by allowing for asymmetric information. Clearly, it would be more realistic to assume that the IFI does not know how well off the domestic government really is in the absence of any assistance. It also would be reasonable to assume that the IFI knows far less than the domestic government about the effectiveness of economic assistance, the government's concern for (dependence on) the general public, and the influence-wielding ability of interest groups. All these modifications can be accommodated by our model. And as they are expected to lead to new insights, we will look at some of them in future research.

One aspect of IFI assistance that is of particular interest and can be addressed by our model concerns the relevance of "property rights" to economic assistance funds. Our model assumes, as is usually done in the principal-agent literature, that the principals offer contracts to the agent. In particular, the IFI offers the domestic government economic assistance conditional on the adoption of less-distorting economic policies. The IFI is assumed to possess the property rights to economic assistance funds and the IFI can make a take-it-or-leave-it offer. The implication is that political support for the government with conditional assistance is no stronger than it is in the absence of economic assistance. The IFI, on the other hand, is much better off under conditional assistance. An alternative assumption would be that a country's government has a 'right' to go to the IFI and to ask for assistance. This

change in property rights to economic assistance funds would lead to a different specification of the model and a different equilibrium economic assistance package. Instead of an offer schedule for economic assistance by the IFI there would be a request schedule for economic assistance by the government. The asking country's government would reduce its distortions only so much as to make the IFI no worse off than it is without giving assistance. In general, there would be less of a reduction in distortions and more generous assistance payments. This suggests that the effectiveness of providing conditional economic assistance through international financial institutions critically hinges on who has ultimate control over the assistance funds.

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